



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/805,053

03/19/2004

Danny Wayne Peters

2003-0754.02

7974

21972

7590

05/02/2006

LEXMARK INTERNATIONAL, INC.
INTELLECTUAL PROPERTY LAW DEPARTMENT
740 WEST NEW CIRCLE ROAD
BLDG. 082-1
LEXINGTON, KY 40550-0999

EXAMINER

MARTINEZ, CARLOS A

ART UNIT

PAPER NUMBER

2853

DATE MAILED: 05/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/805,053

Applicant(s)

PETERS, DANNY WAYNE

Examiner

Carlos A. Martinez

Art Unit

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 14-18 and 22 is/are rejected.
- 7) ☒ Claim(s) 10-13 and 19-21 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 03/19/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Art Unit: 2853

DETAILED ACTION

Claim Objections

Claim 19 is objected to because of the following informalities: "The apparatus" is an improper reference to claim 18 [note: change to "The pre-scan assembly"]. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cannon (US20040047389) in view of Chee (US6671107).

■ Cannon teaches a pre-scan assembly for a laser scanning unit (refer to paragraph [0038]) including a printhead housing (refer to element 56 and paragraph [0043]) and having a scanning element for scanning a light beam (refer to element 36), and a laser light source emitting at least one light beam along a laser beam axis extending toward said scanning element (refer to elements 28a and 28b; paragraphs [0038] and [0040]), where the pre-scan assembly has: a carrier (refer to element 34a and 34b; paragraph [0108]), and a pre-scan lens (refer to elements 32a and 32b) supported in said carrier; a pre-scan mount (refer to element 194a) associated with said housing

Art Unit: 2853

(refer to element 56 and paragraph [0043]) and located between said light source (refer to elements 28a and 28b of Fig. 2; paragraphs [0038] and [0040]) and said scanning element (refer to element 36 of Fig. 2); at least one angular alignment datum surface defined in said pre-scan mount and extending generally parallel to said laser beam axis (refer to elements 202a and inner side walls of 196a; paragraphs [0126] and [0055]; said carrier including at least one carrier alignment surface (refer to surface of 198a and 200a) cooperating with said at least one angular alignment datum surface (refer to inner surface of 202a and inner side walls of 196a).

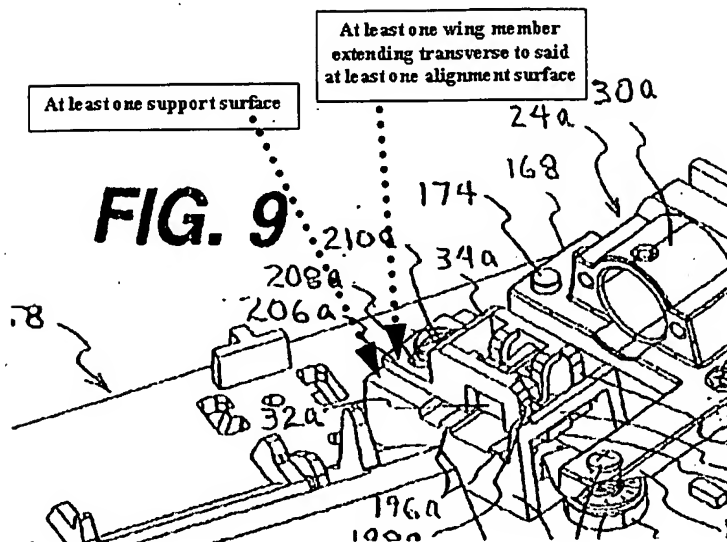
- However, Cannon fails to specifically mention that the pre-scan lens, which is supported in the carrier, sets/defines a lens optical axis. Further, Cannon fails to specifically mention that the lens optical axis is generally aligned relative to said laser beam axis with the cooperating of at least one carrier alignment surface with at least one angular alignment datum surface.
- Chee teaches that the pre-scan lens, which is supported in the carrier, sets/defines a lens optical axis (refer to element 58 and lines 34-44 of column 5). Further, Chee teaches that the lens optical axis is generally aligned relative to said laser beam axis with the cooperating of at least one carrier alignment surface (refer to outer sides surfaces of element 70) with at least one angular alignment datum surface (refer to elements 38 and 36) (refer to lines 60-67 of column 3 and lines 1-8 of column 4).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a pre-scan assembly, as taught by Cannon, with a pre-scan lens, which is supported in the carrier, sets/defines a lens optical axis and that

Art Unit: 2853

has a lens optical axis which is generally aligned relative to said laser beam axis with the cooperating of at least one carrier alignment surface with at least one angular alignment datum surface, as taught by Chee, for the purpose of providing proper alignment between the pre-scan assembly and the light source for emitting a light beam onto a scanning element and for providing such alignment without the need of multiple parts or multiple adjustments.

With respect to claim 2, Cannon teaches at least one carrier alignment surface is movable in a direction transverse to said at least one laser beam axis to locate said at least one carrier alignment surface in engagement with said at least one angular alignment surface (refer to paragraph [0126]).

With respect to claim 3, Cannon teaches where a pre-scan mount includes at least one support surface and said carrier includes at least one wing member extending transverse to said at least one alignment surface and engaged on said at least one support surface (refer to Fig. 9 and paragraph [0126]).



With respect to claim 4, Cannon teaches where at least one carrier alignment surface (refer to surface of 198a and 200a) is movable relative to said at least one angular alignment datum surface (refer to inner surface of 202a and inner side walls of 196a) in a direction parallel to said laser beam axis (refer to paragraphs [0112], [0125], and [0126]).

With respect to claim 5,

- Cannon fails to specifically mention where the pre-scan lens is movable relative to the carrier in a direction transverse to the laser beam axis.
- However, Chee teaches where the pre-scan lens (refer to element 52) is movable relative to the carrier (refer to element 70) in a direction transverse to the laser beam axis (refer to 54-67 of column 4).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a pre-scan assembly, as taught by Cannon, so that the

Art Unit: 2853

pre-scan lens is movable relative to the carrier in a direction transverse to the laser beam axis, as taught by Chee, for the purpose of providing the ability to fit/position a lens into a carrier for use.

With respect to claim 6,

- Cannon teaches where the pre-scan mount (refer to element 194a) includes at least one second alignment datum surface (refer to elements 196a) and where the lower surface of the pre-scan lens engages the second alignment datum surface to a position (refer to paragraph [0126]).
- Cannon fails to specifically disclose where the pre-scan lens includes an upper and a lower surface and where the pre-scan lens is positioned at a predetermined location relative to said laser beam axis.
- However, Chee discloses where the pre-scan lens (refer to element 52) includes an upper (refer to the top of element 52 which is biased with element 82 in Fig. 3) and a lower surface (refer to element 62) and where the pre-scan lens is positioned at a predetermined location relative to said laser beam axis (refer to lines 11-34 of column 5).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a pre-scan assembly, as taught by Cannon, so that the pre-scan lens includes an upper and a lower surface and where the pre-scan lens is positioned at a predetermined location relative to said laser beam axis, as taught by

Art Unit: 2853

Chee, for the purpose of providing support for the lens along with proper alignment and position with respect to laser source and scanning means.

With respect to claim 7,

- Cannon fails to specifically disclose where the carrier includes an upper resilient member engaging the upper surface of the pre-scan lens to bias the pre-scan lens onto the second alignment datum surface.
- However, Chee discloses where the carrier includes an upper resilient member (refer to element 82) engaging the upper surface of the pre-scan lens (refer to the top of element 52 which is biased with element 82 in Fig. 3) to bias the pre-scan lens onto the second alignment datum surface (refer to elements 24 and 26; lines 14-35 of column 4; and lines 1-10 of column 5).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a pre-scan assembly, as taught by Cannon, so that the carrier includes an upper resilient member engaging the upper surface of the pre-scan lens to bias the pre-scan lens onto the second alignment datum surface, as taught by Chee, for the purpose of providing a means to bias the lens towards making contact with the a reference surface.

With respect to claim 8,

- Cannon fails to specifically disclose where the pre-scan lens includes opposing front and rear faces, where the carrier includes an inner surface and a resilient retention

structure located in spaced relation from the carrier inner surface, with the retention structure engaging the rear face of the pre-scan lens to bias the front face of the pre-scan lens into engagement with the inner surface to retain the pre-scan lens in the carrier.

- However, Chee discloses where the pre-scan lens (refer to element 52) includes opposing front (refer to element 64) and rear faces (refer to surface opposite to element 64), where the carrier (refer to element 70) includes an inner surface (refer to element 72) and a resilient retention structure located in spaced relation from the carrier inner surface (refer to element 78), with the retention structure engaging the rear face of the pre-scan lens to bias the front face of the pre-scan lens into engagement with the inner surface to retain the pre-scan lens in the carrier (refer to Fig. 3; lines 14-35 and 54-67 of column 4).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a pre-scan assembly, as taught by Cannon, so that the pre-scan lens includes opposing front and rear faces, where the carrier includes an inner surface and a resilient retention structure located in spaced relation from the carrier inner surface, with the retention structure engaging the rear face of the pre-scan lens to bias the front face of the pre-scan lens into engagement with the inner surface to retain the pre-scan lens in the carrier, as taught by Chee, for the purpose of easily securing a lens in a holder/carrier.

Art Unit: 2853

2. Claims 9 and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cannon (US20040047389) in view of Chee (US6671107).

■ Cannon teaches a pre-scan assembly for a laser scanning unit (refer to paragraph [0038]) including a printhead housing (refer to element 56 and paragraph [0043]) and having a scanning element for scanning a light beam (refer to element 36), and a laser light source emitting at least one light beam along a laser beam axis extending toward said scanning element (refer to elements 28a and 28b; paragraphs [0038] and [0040]), where the pre-scan assembly has: a carrier (refer to element 34a and 34b; paragraph [0108]), and a pre-scan lens (refer to elements 32a and 32b) supported in said carrier; a pre-scan mount (refer to element 194a) associated with said housing (refer to element 56 and paragraph [0043]) and located between said light source (refer to elements 28a and 28b of Fig. 2; paragraphs [0038] and [0040]) and said scanning element (refer to element 36 of Fig. 2); a pair of angular alignment datum surface defined in said pre-scan mount and extending generally parallel to said laser beam axis (refer to elements 202a and inner side walls of 196a; paragraphs [0126] and [0055]; said.

■ However, Cannon fails to specifically mention that the pre-scan lens, which is supported in the carrier, sets/defines a lens optical axis. Further, Cannon fails to specifically mention that the lens optical axis is generally aligned relative to said laser beam axis with the cooperating of at least one carrier alignment surface with at least one angular alignment datum surface. Further, though Cannon teaches a carrier including at least one carrier alignment surface (refer to surface of 198a and 200a),

Art Unit: 2853

Cannon fails to specifically mention a pair of carrier alignment surfaces cooperating with the angular alignment datum surfaces.

- Chee teaches that the pre-scan lens, which is supported in the carrier, sets/defines a lens optical axis (refer to element 58 and lines 34-44 of column 5). Also, Chee teaches that the lens optical axis is generally aligned relative to said laser beam axis with the cooperating of at least one carrier alignment surface (refer to outer sides surfaces of element 70) with at least one angular alignment datum surface (refer to elements 38 and 36) (refer to lines 60-67 of column 3 and lines 1-8 of column 4). Further, Chee teaches a pair of carrier alignment surfaces (refer to outer sides surfaces of element 70 that make contact with elements 38 and 36) cooperating with the angular alignment datum surfaces (refer to elements 38 and 36) (refer to lines 60-67 of column 3 and lines 1-8 of column 4).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a pre-scan assembly, as taught by Cannon, with a pre-scan lens, which is supported in the carrier, sets/defines a lens optical axis and that has a lens optical axis which is generally aligned relative to said laser beam axis with the cooperating of at least one carrier alignment surface with at least one angular alignment datum surface, and a pair of carrier alignment surfaces cooperating with the angular alignment datum surfaces, as taught by Chee, for the purpose of providing proper alignment between the pre-scan assembly and the light source for emitting a light beam onto a scanning element and for providing such alignment without the need of multiple parts or multiple adjustments.

With respect to claim 14,

- Cannon fails to specifically mention where the pre-scan lens is movable relative to the carrier in a direction transverse to the laser beam axis.
- However, Chee teaches where the pre-scan lens (refer to element 52) is movable relative to the carrier (refer to element 70) in a direction transverse to the laser beam axis (refer to 54-67 of column 4).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a pre-scan assembly, as taught by Cannon, so that the pre-scan lens is movable relative to the carrier in a direction transverse to the laser beam axis, as taught by Chee, for the purpose of providing the ability to fit/position a lens into a carrier for use.

With respect to claim 15,

- Cannon teaches where the pre-scan mount (refer to element 194a) includes a second alignment datum surface (refer to elements 196a) and where the lower surface of the pre-scan lens engages the second alignment datum surface to a position (refer to paragraph [0126]).
- Cannon fails to specifically disclose where the pre-scan lens includes an upper and a lower surface and where the pre-scan lens is positioned at a predetermined location relative to said laser beam axis.

- However, Chee discloses where the pre-scan lens (refer to element 52) includes an upper (refer to the top of element 52 which is biased with element 82 in Fig. 3) and a lower surface (refer to element 62) and where the pre-scan lens is positioned at a predetermined location relative to said laser beam axis (refer to lines 11-34 of column 5).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a pre-scan assembly, as taught by Cannon, so that the pre-scan lens includes an upper and a lower surface and where the pre-scan lens is positioned at a predetermined location relative to said laser beam axis, as taught by Chee, for the purpose of providing support for the lens along with proper alignment and position with respect to laser source and scanning means.

With respect to claim 16,

- Cannon fails to specifically disclose where the carrier includes an upper resilient member engaging the upper surface of the pre-scan lens to bias the pre-scan lens onto the second alignment datum surface.
- However, Chee discloses where the carrier includes an upper resilient member (refer to element 82) engaging the upper surface of the pre-scan lens (refer to the top of element 52 which is biased with element 82 in Fig. 3) to bias the pre-scan lens onto the second alignment datum surface (refer to elements 24 and 26; lines 14-35 of column 4; and lines 1-10 of column 5).

Art Unit: 2853

- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a pre-scan assembly, as taught by Cannon, so that the carrier includes an upper resilient member engaging the upper surface of the pre-scan lens to bias the pre-scan lens onto the second alignment datum surface, as taught by Chee, for the purpose of providing a means to bias the lens towards making contact with the a reference surface.

With respect to claim 17,

- Cannon fails to specifically disclose where the pre-scan lens includes opposing front and rear faces, where the carrier includes an inner surface and a resilient retention structure located in spaced relation from the carrier inner surface, with the retention structure engaging the rear face of the pre-scan lens to bias the front face of the pre-scan lens into engagement with the inner surface to retain the pre-scan lens in the carrier.
- However, Chee discloses where the pre-scan lens (refer to element 52) includes opposing front (refer to element 64) and rear faces (refer to surface opposite to element 64), where the carrier (refer to element 70) includes an inner surface (refer to element 72) and a resilient retention structure located in spaced relation from the carrier inner surface (refer to element 78), with the retention structure engaging the rear face of the pre-scan lens to bias the front face of the pre-scan lens into engagement with the inner surface to retain the pre-scan lens in the carrier (refer to Fig. 3; lines 14-35 and 54-67 of column 4).

Art Unit: 2853

- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a pre-scan assembly, as taught by Cannon, so that the pre-scan lens includes opposing front and rear faces, where the carrier includes an inner surface and a resilient retention structure located in spaced relation from the carrier inner surface, with the retention structure engaging the rear face of the pre-scan lens to bias the front face of the pre-scan lens into engagement with the inner surface to retain the pre-scan lens in the carrier, as taught by Chee, for the purpose of easily securing a lens in a holder/carrier.

3. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cannon (US20040047389) in view of Chee (US6671107).

- Cannon teaches a pre-scan assembly for a laser scanning unit (refer to paragraph [0038]) including a printhead housing (refer to element 56 and paragraph [0043]) and having a scanning element for scanning a light beam (refer to element 36), and a laser light source emitting at least one light beam along a laser beam axis extending toward said scanning element (refer to elements 28a and 28b; paragraphs [0038] and [0040]), where the pre-scan assembly has: a carrier (refer to element 34a and 34b; paragraph [0108]), and a pre-scan lens (refer to elements 32a and 32b) supported in said carrier; a pre-scan mount (refer to element 194a) located adjacent said collimation assembly (refer to element 27a and 27b of Fig. 2; paragraphs [0108] and [0109]); a pair of angular alignment datum surface defined in said pre-scan mount

Art Unit: 2853

and extending generally parallel to said laser beam axis (refer to elements 202a and inner side walls of 196a; paragraphs [0126] and [0055]; said.

- However, Cannon fails to specifically mention that the pre-scan lens, which is supported in the carrier, sets/defines a lens optical axis. Further, Cannon fails to specifically mention that the lens optical axis is generally aligned relative to said laser beam axis with the cooperating of at least one carrier alignment surface with at least one angular alignment datum surface. Further, though Cannon teaches a carrier including at least one carrier alignment surface (refer to surface of 198a and 200a), Cannon fails to specifically mention a pair of carrier alignment surfaces cooperating with the angular alignment datum surfaces.
- Chee teaches that the pre-scan lens, which is supported in the carrier, sets/defines a lens optical axis (refer to element 58 and lines 34-44 of column 5). Also, Chee teaches that the lens optical axis is generally aligned relative to said laser beam axis with the cooperating of at least one carrier alignment surface (refer to outer sides surfaces of element 70) with at least one angular alignment datum surface (refer to elements 38 and 36) (refer to lines 60-67 of column 3 and lines 1-8 of column 4). Further, Chee teaches a pair of carrier alignment surfaces (refer to outer sides surfaces of element 70 that make contact with elements 38 and 36) cooperating with the angular alignment datum surfaces (refer to elements 38 and 36) (refer to lines 60-67 of column 3 and lines 1-8 of column 4).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a pre-scan assembly, as taught by Cannon, with a pre-

Art Unit: 2853

scan lens, which is supported in the carrier, sets/defines a lens optical axis and that has a lens optical axis which is generally aligned relative to said laser beam axis with the cooperating of at least one carrier alignment surface with at least one angular alignment datum surface, and a pair of carrier alignment surfaces cooperating with the angular alignment datum surfaces, as taught by Chee, for the purpose of providing proper alignment between the pre-scan assembly and the light source for emitting a light beam onto a scanning element and for providing such alignment without the need of multiple parts or multiple adjustments.

4. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cannon (US20040047389) in view of Chee (US6671107), as applied to claim 18 above, and further in view of Kitamura (US4474422).

- Cannon (in view of Chee) fails to specifically mention where a second light beam is emitted by the laser light source, and the collimation assembly substantially collimating the second light beam, the pre-scan lens causing the light beams to converge to substantially the same location on the scanning element.
- However, Kitamura teaches where a second light beam is emitted by the laser light source, and the collimation assembly substantially collimating the second light beam, the pre-scan lens causing the light beams to converge to substantially the same location on the scanning element (refer to Fig. 7; lines 46-68 of column 4 and lines 1-24 of column 5).

Art Unit: 2853

- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a pre-scan assembly, as taught by Cannon (in view of Chee), where a second light beam is emitted by the laser light source, and the collimation assembly substantially collimating the second light beam, the pre-scan lens causing the light beams to converge to substantially the same location on the scanning element, as taught by Kitamura, for the purpose of providing the ability for multiple beams to write to the same location or relatively close to the same location.

Allowable Subject Matter

5. Claims 10-13 and 19-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Claims 10-13 are allowable over the art of record because the prior art does not teach a pre-scan assembly for a laser scanning unit including a printhead housing and having a scanning element for scanning a light beam, and a laser light source emitting at least one light beam along a laser beam axis extending toward the scanning element, where the pre-scan assembly is comprised of: a pre-scan lens assembly including a carrier, and a pre-scan lens supported in the carrier and defining a lens optical axis; a pre-scan mount associated with the housing and located between the light source and the scanning element; a pair of angular alignment datum surfaces defined in the pre-scan mount and extending generally parallel to the laser beam axis; where the carrier

Art Unit: 2853

includes a pair of carrier alignment surfaces cooperating with the angular alignment datum surfaces, whereby the lens optical axis is generally aligned relative to the laser beam axis; where the pre-scan mount includes a support surface associated with each of the angular alignment datum surfaces and the carrier includes opposing sides, at least a portion of the carrier sides defining the carrier alignment surfaces, and a wing member extending from each side of the carrier transverse to the alignment surfaces, each wing member engaged on one of the support surfaces; including fasteners biasing the wing members toward the support surfaces; where the wing members each include a slot portion, elongated in a direction parallel to the laser beam axis, for receiving a respective fastener, whereby the carrier is movable along the support surfaces; and where the carrier comprises a flexible central structure joining the opposing sides whereby the carrier alignment surfaces are movable relative to one another.

The following is a statement of reasons for the indication of allowable subject matter: Claims 19-21 are allowable over the art of record because the prior art does not teach pre-scan assembly in a laser scanning unit that includes a printhead housing and having a scanning element for scanning a light beam, and a laser light source emitting at least one light beam along a laser beam axis extending toward the scanning element, where the pre-scan assembly is comprised of: a pre-scan lens assembly including a carrier, and a pre-scan lens supported in the carrier and defining a lens optical axis; a pre-scan mount located adjacent the collimation assembly; a pair of angular alignment datum surfaces defined in the pre-scan mount and extending generally parallel to the laser beam axis; where the carrier includes a pair of carrier alignment surfaces cooperating with the angular alignment datum surfaces, whereby the lens optical axis is generally aligned

Art Unit: 2853

relative to the laser beam axis; where the pre-scan mount includes a support surface associated with each of the angular alignment datum surfaces and the carrier includes opposing sides, at least a portion of the carrier sides defining the carrier alignment surfaces, and a wing member extending from each side of the carrier transverse to the alignment surfaces, each wing member engaged on one of the support surfaces; including fasteners biasing the wing members toward the support surfaces; and where the wing members each include a slot portion for receiving a respective fastener, whereby the carrier is movable along the support surfaces in a process direction.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos A. Martinez whose telephone number is (571) 272-8349. The examiner can normally be reached on 8:30 am - 5:00 pm (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, STEPHEN D. MEIER can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CAM
04/28/2006


HAI PHAM
PRIMARY EXAMINER